

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P252175

Luminaire Tested: **LD6B30D010 EU6B30509035 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252175
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B30D010 EU6B30509035 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3258.0 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

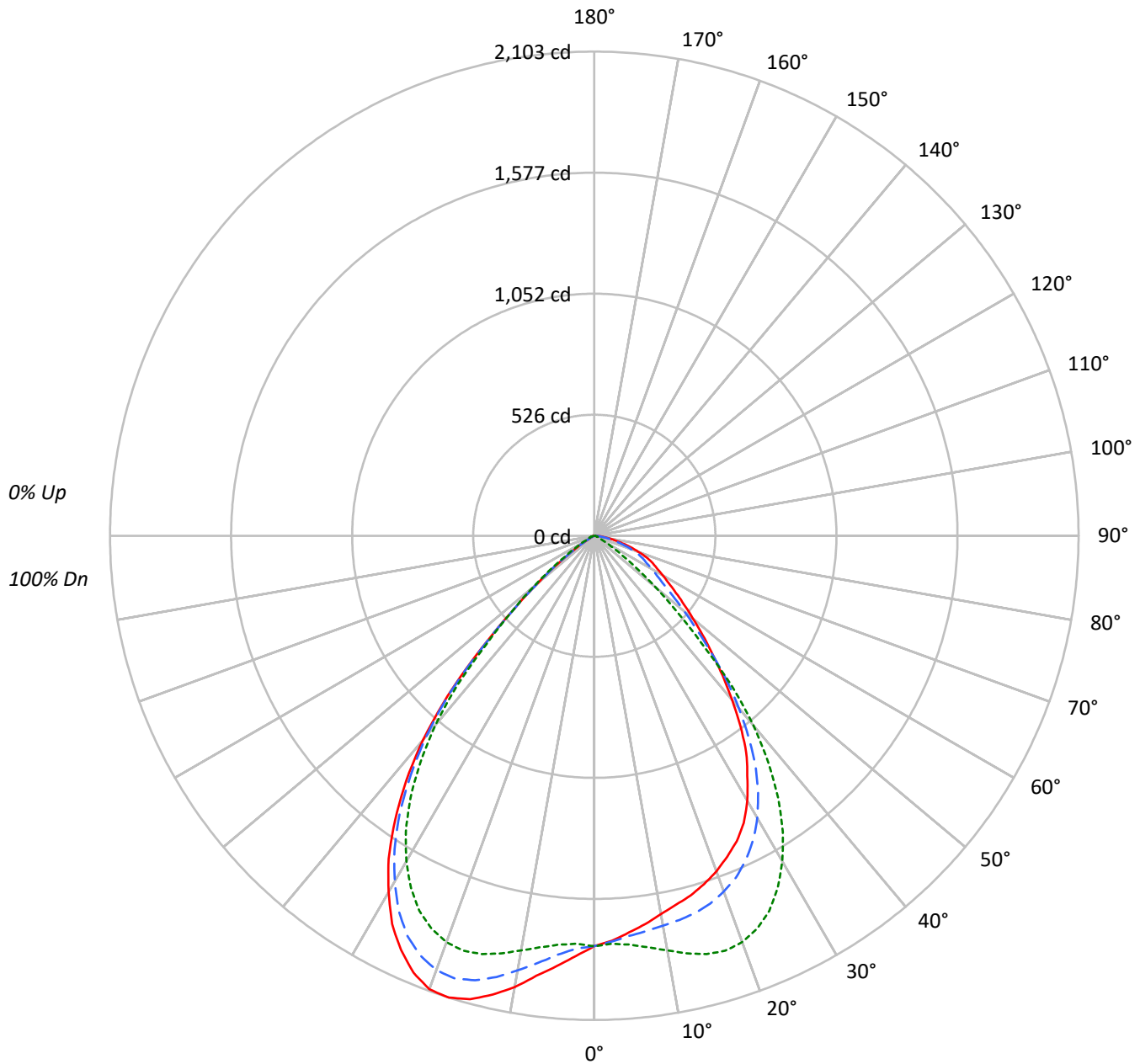
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252175

CATALOG NUMBER: LD6B30D010 EU6B30509035 6LBSW1LI

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80		
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72		
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65		
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58		
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53		
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48		
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44		
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40		
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	116285	116285	116285
5°	113271	116729	122865
10°	110513	121126	131852
15°	109222	127060	140758
20°	107654	130371	145513
25°	105365	129408	142905
30°	100126	122974	134530
35°	91607	110881	120103
40°	79238	91570	98537
45°	66818	60055	64456
50°	56726	34763	32692
55°	49228	16663	12603
60°	44468	7777	3119
65°	43147	4477	1050
70°	38684	3567	973
75°	31786	2571	429
80°	23669	1277	0
85°	20435	0	0



TEST NUMBER: P252175

CATALOG NUMBER: LD6B30D010 EU6B30509035 6LBSW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.2	5.3
10°-20°	524.7	16.1
20°-30°	801.7	24.6
30°-40°	838.5	25.7
40°-50°	543.9	16.7
50°-60°	216.0	6.6
60°-70°	102.4	3.1
70°-80°	48.7	1.5
80°-90°	9.9	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1498.5	46.0
0°-40°	2337.0	71.7
0°-60°	3096.9	95.1
0°-90°	3258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3258.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1782	1782	1782	1782	1782	
5°	1730	1745	1782	1827	1876	163
15°	1617	1696	1881	1999	2084	456
25°	1464	1556	1798	1919	1985	670
35°	1150	1220	1392	1474	1508	711
45°	724	717	651	690	699	564
55°	433	368	146	114	111	392
65°	280	232	29	7	7	273
75°	126	102	10	3	2	136
85°	27	17	0	0	0	32
90°	0	0	0	0	0	



TEST NUMBER: P252175

CATALOG NUMBER: LD6B30D010 EU6B30509035 6LBSW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4
2.5°	1760.2	1763.6	1744.9	1739.8	1753.4	1758.5	1760.2	1755.1	1756.8	1763.6	1763.6
5°	1729.6	1733.0	1715.9	1710.8	1724.4	1727.9	1733.0	1731.3	1736.4	1746.6	1744.9
7.5°	1700.6	1705.7	1687.0	1680.1	1697.2	1705.7	1709.1	1709.1	1715.9	1729.6	1731.3
10°	1668.2	1675.0	1658.0	1654.6	1673.3	1681.8	1683.6	1687.0	1697.2	1715.9	1719.3
12.5°	1641.0	1647.8	1635.8	1630.7	1651.2	1659.7	1663.1	1669.9	1681.8	1705.7	1709.1
15°	1617.1	1622.2	1608.6	1605.2	1625.6	1635.8	1637.5	1647.8	1663.1	1690.4	1695.5
17.5°	1586.4	1589.8	1579.6	1576.2	1596.6	1606.9	1608.6	1620.5	1639.2	1666.5	1675.0
20°	1550.6	1554.0	1543.8	1540.4	1560.9	1572.8	1574.5	1584.7	1606.9	1635.8	1644.4
22.5°	1508.0	1514.9	1502.9	1499.5	1520.0	1530.2	1535.3	1543.8	1566.0	1594.9	1606.9
25°	1463.7	1463.7	1455.2	1453.5	1472.3	1484.2	1482.5	1494.4	1516.6	1545.5	1555.8
27.5°	1405.8	1404.1	1395.6	1393.9	1414.3	1424.5	1421.1	1433.1	1453.5	1482.5	1492.7
30°	1329.1	1332.5	1320.6	1317.2	1334.2	1351.3	1349.6	1361.5	1381.9	1409.2	1416.0
32.5°	1237.1	1240.5	1238.8	1233.7	1249.0	1257.6	1262.7	1271.2	1288.2	1317.2	1324.0
35°	1150.2	1145.1	1138.3	1138.3	1153.6	1167.2	1162.1	1172.4	1189.4	1218.4	1220.1
37.5°	1042.8	1041.1	1037.7	1034.3	1051.4	1054.8	1056.5	1063.3	1078.6	1102.5	1099.1
40°	930.4	932.1	930.4	923.6	933.8	947.4	945.7	949.1	962.8	979.8	974.7
42.5°	824.7	824.7	824.7	817.9	829.8	836.7	840.1	838.4	841.8	857.1	850.3
45°	724.2	725.9	724.2	722.5	724.2	727.6	724.2	722.5	722.5	727.6	717.4
47.5°	637.3	637.3	632.2	627.1	632.2	633.9	628.8	623.7	622.0	620.3	603.2
50°	558.9	557.2	555.5	547.0	552.1	553.8	547.0	543.6	536.8	528.2	507.8
52.5°	490.8	489.0	487.3	478.8	482.2	483.9	477.1	470.3	461.8	455.0	429.4
55°	432.8	431.1	431.1	426.0	422.6	426.0	419.2	414.1	402.1	393.6	368.1
57.5°	383.4	383.4	380.0	374.9	376.6	376.6	369.8	363.0	352.7	342.5	322.1
60°	340.8	340.8	340.8	335.7	335.7	335.7	332.3	325.5	316.9	306.7	286.3
62.5°	306.7	306.7	305.0	299.9	301.6	301.6	298.2	291.4	282.9	276.0	255.6
65°	279.5	279.5	279.5	274.3	274.3	276.0	272.6	265.8	259.0	250.5	231.7
67.5°	245.4	243.7	243.7	240.3	242.0	243.7	240.3	235.2	226.6	221.5	204.5
70°	202.8	204.5	206.2	201.1	202.8	202.8	201.1	196.0	190.8	185.7	170.4
72.5°	165.3	165.3	163.6	161.9	161.9	163.6	160.2	155.1	151.7	148.2	136.3
75°	126.1	124.4	126.1	122.7	122.7	122.7	119.3	117.6	115.9	110.8	102.2
77.5°	92.0	90.3	90.3	86.9	88.6	88.6	86.9	83.5	80.1	78.4	71.6
80°	63.0	63.0	63.0	61.3	61.3	59.6	59.6	57.9	54.5	52.8	49.4
82.5°	42.6	42.6	42.6	40.9	40.9	40.9	39.2	37.5	35.8	34.1	30.7
85°	27.3	27.3	27.3	25.6	25.6	25.6	23.9	23.9	22.2	20.4	17.0
87.5°	15.3	15.3	15.3	13.6	13.6	13.6	13.6	13.6	11.9	10.2	8.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252175

CATALOG NUMBER: LD6B30D010 EU6B30509035 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4
2.5°	1775.6	1751.7	1767.0	1767.0	1761.9	1775.6	1784.1	1790.9	1789.2	1773.9	1772.2
5°	1761.9	1741.5	1758.5	1760.2	1755.1	1773.9	1785.8	1794.3	1796.0	1782.4	1784.1
7.5°	1751.7	1734.7	1756.8	1763.6	1761.9	1779.0	1792.6	1806.2	1813.1	1802.8	1804.5
10°	1746.6	1733.0	1756.8	1767.0	1768.8	1787.5	1807.9	1826.7	1835.2	1828.4	1833.5
12.5°	1739.8	1731.3	1758.5	1773.9	1780.7	1799.4	1825.0	1847.1	1860.8	1857.4	1867.6
15°	1733.0	1726.2	1758.5	1780.7	1789.2	1806.2	1835.2	1867.6	1882.9	1881.2	1894.8
17.5°	1715.9	1714.2	1748.3	1772.2	1784.1	1804.5	1831.8	1871.0	1886.3	1889.7	1906.8
20°	1688.7	1688.7	1726.2	1751.7	1765.3	1784.1	1818.2	1855.7	1874.4	1877.8	1896.6
22.5°	1651.2	1654.6	1690.4	1715.9	1736.4	1750.0	1785.8	1825.0	1842.0	1847.1	1867.6
25°	1601.8	1605.2	1639.2	1664.8	1687.0	1702.3	1736.4	1772.2	1792.6	1797.7	1813.1
27.5°	1537.0	1543.8	1576.2	1601.8	1620.5	1630.7	1666.5	1704.0	1719.3	1724.4	1739.8
30°	1462.0	1463.7	1496.1	1518.3	1537.0	1545.5	1576.2	1615.4	1627.3	1632.4	1654.6
32.5°	1370.0	1368.3	1399.0	1419.4	1434.8	1445.0	1477.4	1502.9	1514.9	1523.4	1535.3
35°	1259.3	1257.6	1279.7	1303.6	1315.5	1318.9	1351.3	1378.5	1385.4	1392.2	1407.5
37.5°	1134.9	1134.9	1153.6	1165.5	1179.2	1184.3	1199.6	1230.3	1242.2	1240.5	1252.4
40°	1003.7	996.8	1010.5	1022.4	1025.8	1027.5	1042.8	1066.7	1075.2	1075.2	1083.7
42.5°	865.6	855.4	857.1	863.9	867.3	855.4	865.6	881.0	875.9	882.7	884.4
45°	719.1	703.8	696.9	681.6	685.0	673.1	666.3	669.7	668.0	650.9	654.3
47.5°	599.8	572.5	560.6	538.5	533.4	519.7	511.2	495.9	482.2	482.2	473.7
50°	499.3	472.0	448.2	422.6	414.1	402.1	383.4	363.0	352.7	342.5	334.0
52.5°	419.2	390.2	361.2	334.0	322.1	306.7	281.2	260.7	242.0	231.7	221.5
55°	354.4	322.1	291.4	262.4	247.1	231.7	206.2	182.3	160.2	146.5	138.0
57.5°	305.0	274.3	242.0	211.3	197.7	180.6	153.4	127.8	107.4	92.0	83.5
60°	269.2	238.6	209.6	177.2	163.6	146.5	117.6	93.7	73.3	59.6	49.4
62.5°	238.6	211.3	180.6	151.7	138.0	121.0	93.7	69.9	51.1	37.5	29.0
65°	216.4	189.1	163.6	134.6	122.7	105.6	80.1	57.9	40.9	29.0	20.4
67.5°	190.8	167.0	141.4	117.6	105.6	92.0	68.2	49.4	34.1	23.9	17.0
70°	160.2	141.4	119.3	97.1	88.6	76.7	56.2	40.9	27.3	18.7	13.6
72.5°	127.8	112.5	95.4	78.4	71.6	59.6	46.0	32.4	20.4	13.6	10.2
75°	97.1	85.2	71.6	59.6	52.8	46.0	34.1	23.9	15.3	10.2	6.8
77.5°	66.5	61.3	51.1	40.9	37.5	32.4	22.2	15.3	10.2	6.8	3.4
80°	46.0	40.9	34.1	27.3	23.9	20.4	13.6	10.2	5.1	3.4	1.7
82.5°	29.0	23.9	20.4	17.0	15.3	11.9	8.5	5.1	3.4	1.7	1.7
85°	15.3	13.6	11.9	8.5	8.5	6.8	5.1	3.4	1.7	0.0	0.0
87.5°	8.5	6.8	5.1	3.4	3.4	1.7	1.7	1.7	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252175

CATALOG NUMBER: LD6B30D010 EU6B30509035 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4
2.5°	1792.6	1792.6	1790.9	1811.4	1787.5	1811.4	1799.4	1811.4	1794.3	1792.6	1794.3
5°	1806.2	1811.4	1813.1	1831.8	1809.6	1838.6	1828.4	1838.6	1826.7	1830.1	1835.2
7.5°	1833.5	1842.0	1840.3	1864.2	1842.0	1874.4	1867.6	1882.9	1871.0	1874.4	1881.2
10°	1864.2	1874.4	1876.1	1900.0	1879.5	1918.7	1910.2	1927.2	1917.0	1922.1	1930.6
12.5°	1900.0	1911.9	1913.6	1940.9	1918.7	1959.6	1954.5	1971.5	1963.0	1968.1	1978.3
15°	1927.2	1944.3	1947.7	1974.9	1951.1	1993.7	1990.3	2012.4	1998.8	2007.3	2015.8
17.5°	1940.9	1956.2	1963.0	1988.6	1968.1	2010.7	2007.3	2026.1	2015.8	2024.4	2034.6
20°	1932.3	1951.1	1956.2	1981.8	1961.3	2003.9	1998.8	2017.5	2007.3	2014.1	2024.4
22.5°	1901.7	1920.4	1927.2	1951.1	1932.3	1971.5	1969.8	1986.9	1973.2	1981.8	1990.3
25°	1847.1	1867.6	1871.0	1893.1	1872.7	1913.6	1910.2	1928.9	1918.7	1923.8	1935.7
27.5°	1768.8	1792.6	1797.7	1816.5	1801.1	1835.2	1835.2	1850.5	1838.6	1838.6	1850.5
30°	1675.0	1698.9	1702.3	1717.6	1704.0	1734.7	1736.4	1751.7	1733.0	1743.2	1744.9
32.5°	1560.9	1576.2	1586.4	1600.1	1579.6	1618.8	1613.7	1625.6	1615.4	1615.4	1623.9
35°	1422.8	1441.6	1446.7	1463.7	1446.7	1477.4	1477.4	1484.2	1474.0	1474.0	1487.6
37.5°	1272.9	1286.5	1288.2	1305.3	1291.6	1317.2	1315.5	1320.6	1310.4	1317.2	1317.2
40°	1097.4	1107.6	1111.0	1119.5	1117.8	1136.6	1134.9	1138.3	1133.2	1134.9	1138.3
42.5°	892.9	906.5	913.3	920.2	909.9	935.5	930.4	935.5	933.8	935.5	940.6
45°	657.7	668.0	673.1	674.8	671.4	686.7	698.6	688.4	690.1	686.7	693.5
47.5°	475.4	477.1	473.7	483.9	475.4	482.2	485.6	487.3	477.1	475.4	482.2
50°	325.5	334.0	322.1	327.2	325.5	332.3	328.9	330.6	320.4	325.5	322.1
52.5°	216.4	214.7	211.3	213.0	209.6	209.6	209.6	213.0	206.2	202.8	199.4
55°	131.2	127.8	121.0	119.3	119.3	121.0	117.6	114.2	114.2	112.5	112.5
57.5°	76.7	71.6	68.2	66.5	63.0	61.3	59.6	59.6	56.2	56.2	56.2
60°	42.6	37.5	34.1	30.7	30.7	29.0	27.3	25.6	25.6	25.6	23.9
62.5°	22.2	18.7	15.3	13.6	13.6	11.9	10.2	10.2	10.2	10.2	8.5
65°	15.3	11.9	10.2	8.5	8.5	6.8	6.8	6.8	6.8	6.8	6.8
67.5°	11.9	10.2	8.5	6.8	6.8	6.8	5.1	5.1	5.1	5.1	5.1
70°	10.2	6.8	6.8	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
72.5°	6.8	6.8	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
75°	5.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0
80°	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252175

CATALOG NUMBER: LD6B30D010 EU6B30509035 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4	1782.4
2.5°	1809.6	1807.9	1809.6	1813.1	1806.2	1826.7	1816.5	1826.7
5°	1848.8	1850.5	1852.2	1857.4	1848.8	1874.4	1860.8	1876.1
7.5°	1900.0	1901.7	1903.4	1908.5	1903.4	1928.9	1913.6	1927.2
10°	1952.8	1956.2	1956.2	1964.7	1959.6	1983.5	1973.2	1990.3
12.5°	2002.2	2005.6	2009.0	2014.1	2010.7	2036.3	2027.8	2041.4
15°	2041.4	2048.2	2049.9	2056.7	2053.3	2080.6	2070.4	2084.0
17.5°	2060.1	2067.0	2067.0	2075.5	2072.1	2101.0	2087.4	2102.7
20°	2049.9	2055.0	2056.7	2065.2	2061.8	2090.8	2077.2	2095.9
22.5°	2017.5	2019.2	2020.9	2029.5	2027.8	2053.3	2041.4	2053.3
25°	1957.9	1963.0	1961.3	1968.1	1968.1	1988.6	1974.9	1985.2
27.5°	1872.7	1877.8	1877.8	1886.3	1879.5	1900.0	1886.3	1901.7
30°	1768.8	1773.9	1770.5	1777.3	1770.5	1790.9	1780.7	1785.8
32.5°	1644.4	1644.4	1646.1	1647.8	1644.4	1663.1	1652.9	1663.1
35°	1496.1	1499.5	1501.2	1502.9	1499.5	1513.2	1501.2	1508.0
37.5°	1329.1	1337.6	1335.9	1337.6	1332.5	1349.6	1339.3	1342.8
40°	1150.2	1150.2	1148.5	1151.9	1146.8	1160.4	1153.6	1157.0
42.5°	942.3	947.4	940.6	949.1	935.5	954.2	947.4	942.3
45°	707.2	700.3	698.6	700.3	695.2	696.9	702.0	698.6
47.5°	482.2	482.2	478.8	473.7	480.5	482.2	475.4	475.4
50°	323.8	323.8	320.4	318.6	322.1	320.4	316.9	322.1
52.5°	206.2	199.4	199.4	202.8	199.4	196.0	201.1	197.7
55°	112.5	109.1	109.1	112.5	109.1	109.1	107.4	110.8
57.5°	54.5	56.2	54.5	54.5	54.5	54.5	52.8	54.5
60°	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
62.5°	10.2	10.2	8.5	8.5	8.5	8.5	8.5	8.5
65°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
67.5°	5.1	5.1	5.1	5.1	5.1	6.8	5.1	5.1
70°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
72.5°	5.1	5.1	6.8	6.8	6.8	6.8	6.8	6.8
75°	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)